

illnesses that are related to the toxic hydrogen sulfide and ammonia fumes rising from these lagoons. The most common illnesses are respiratory disease and eye infections.⁴ These illnesses have become so common that six counties in Iowa have placed a moratorium on building new CAFOs in the best in interest of public health.

The lagoons are dug deep into the ground, at times dangerously close to aquifers and agricultural drainage wells. Lagoons that are not properly lined or leak over time seep hog waste into groundwater, spreading dangerously high levels of nitrogen and phosphate into water sources. If the lagoons overflow due to mismanagement, malfunction, or heavy rain, the waste run-off spreads into lakes and rivers, resulting in massive fish kills and disruptions in the ecosystem. The largest fish kill incident in recent Iowan history was in 1996 in Winnebago County. It dumped 100,000 gallons of waste into North Buffalo Creek, killing over 500 thousand fish.⁵

Iowan legislative and judicial systems are slowly becoming more concerned with the negative impacts of these operations. Iowa has enacted legislation that is placing stricter regulations on hog CAFOs, requiring higher levels of air quality and lower seepage rates. Iowan courts have been more apt to award damages in nuisance law suits, with the record award of \$32 million in punitive damages to area residents in *Blass v. Iowa Select* (2002). The Iowa Groundwater Protection Act of 1987 created three research centers to find viable agricultural alternatives in hog production that protect water quality. One of these centers is the nationally-recognized Leopold Center for Sustainable Agriculture at Iowa State University.

The Leopold Center supports alternatives to modern hog farming practices, suggesting that a shift in the hog industry towards mid-sized, diversified livestock operations could be the answer to long-term economic and environmental sustainability in Iowa.⁶ Some alternative systems involve raising pigs outdoors in rotation with crops. Similar systems have been adapted with success by many organic Iowa farmers, such as farmer Dan Specht in Northeast Iowa, a leading participant of the USDA Northeast Iowa Demonstration Project.⁷ Grass-based animal production systems result in healthier pigs and people while also protecting the land and water quality.

Alternatives to modern hog farming practices are possible, although they must be gradual to allow the Iowan

economy to adapt to a new structure. Consumer demand is a powerful catalyst. By choosing to eat pork raised in sustainable systems (aka “free-range”), the every day consumer can make a big difference. In Iowa City, free-range

pork can be purchased at the New Pioneer Co-op.

Consider stopping by the New Pioneer Co-op for

some free-range pork next time pork is on the

menu. The price may be a little higher, but you

can make a statement that sustainable

agriculture is worth the extra dollar, and

thereby encourage growth in these markets.

In addition, you will be healthier because

free-range pork is a higher quality meat that is

less contaminated by pathogens and antibiotics

and higher in nutrients. Free-range pork is better

for you and—reputation has it—also much tastier!

Make the switch, and feel good about your contribution to

Iowa’s future in sustainable agriculture.

1. Iowa Department of Economic Development
2. Economic Research Service, USDA
3. Iowa Department of Natural Resources
4. 2002 report from Iowa State University and the University of Iowa
5. Iowa Environmental Council
6. Swine System Options for Iowa The Leopold Center, Iowa State University
7. USA Northeast Iowa Demonstration Project (NIDP)

SHOULD YOU BE USING YOUR SOAP?

If it’s one of the popular anti-microbial or anti-bacterial soaps, think about tossing it in the garbage when you get home. Why? It may not be good for you, or the rest of us! While these soaps (and other similarly labeled products) sound great, they could cause problems. First, they affect all bacteria, not just the kinds that make you sick. Humans naturally have “good” bacteria. Killing these microbes disrupts our natural balance. Second, have you noticed the label promises to kill 99.9% of the bacteria? Well, that .1% that survived lived for a reason – it developed a resistance. To make matters worse, with the rest gone, that .1% now has ample resources on which to thrive. The more we use these products the more we encourage the bacteria we are unable to kill. Overuse of these anti-microbial soaps may eventually help create “super bacteria” – much like the overuse and misuse of antibiotics. Next time you’re at the store, pick up some good, old-fashioned soap and alcohol-based cleaning products – you can still find them, if you look hard enough!

Harmony Mappes

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Grass-based animal production systems result in healthier pigs and people



HURRICANE KATRINA HITS ENVIRONMENT, ECONOMY

Jessica Blome

“The Hurricane Katrina tragedy is not a wake-up call, as some have described it; rather it is a consequence of past wake-up calls unheeded,” remarked the Member Scholars of the Center for Progressive Reform (MSCPR) in a September 2005 article entitled *An Unnatural Disaster: The Aftermath of Hurricane Katrina*. Characterizing the Katrina aftermath as a consequence is accurate when considering the various ways the hurricane impacted the gulf coast. New Orleans and its neighbors have battled environmental, public health and economic problems on unprecedented scales.

a consequence of past wake-up calls unheeded

“The legal environmental aspects of Hurricane Katrina and her aftermath are so vast that most of us in the field have not tried to plunge into the issues,” Environmental law Professor John Mark Stensvaag said. “It is a very daunting topic.”

According to the MSCPR, prior to Hurricane Katrina, Louisiana’s coastal wetlands were being lost at a rate of

FREE RANGE AND SUSTAINABLE AGRICULTURE FOR IOWA

Andrea Reed

There are more pigs than people in Iowa. In fact, the little porkers outnumber Iowans 5.3 to 1.¹ That’s a lot of bacon, bringing over 2.5 billion dollars² in annual revenue, in addition to stimulating revenues in related industries. Modern hog farming systems have evolved into efficient giants of mass production, but they have also evolved beyond the capacity of the land to sustain this type of agriculture.

Modern hog farms are usually owned by large corporations, raising thousands of hogs in concentrated animal feeding operations (CAFOs). On these farms, hogs are tightly packed into small pens and live on slotted floors that give way to the enormous pit of urine and manure below. These “lagoons” hold millions of gallons of waste, which is necessary when each hog produces over 3 gallons of waste a day.³ Animal welfare issues aside, these farms present health risks to humans and dangers to the environment.

Hog farm workers and neighboring residents complain of

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6,600 acres per year due to the levee networks, navigational channels and oil/gas infrastructure. These man-made waterways created “hurricane highways” by facilitating the movement of hurricanes past marshlands like “liquid bulldozers.”

After the hurricane hit, the city of New Orleans was forced to pump the contaminated water back into Lake Pontchartrain, the lake that separates New Orleans from the Gulf of Mexico, and the Gulf. The marine ecosystem will suffer exponentially from the pollution and Lake Pontchartrain’s environmental cleanup setbacks will take years to repair.

“No one has speculated as to the extent of the environmental damage to Lake Pontchartrain,” University of Iowa Professor of Biological Sciences Stephen Hendrix said. “The biggest concern right now is what to do with the hard debris.”

Hendrix said that most of the wood, sheet metal, appliances, cars, etc. will have to be taken somewhere.

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THE WOODPECKER THAT LIVED!

Harry Potter isn’t the only one to escape certain death.

The ivory-billed woodpecker, previously believed to be extinct, has been found in Arkansas! This is a very exciting event for bird and nature lovers. The Nature Conservancy is leading efforts to protect its habitat, the “Big Woods.” For more details of this fascinating and inspirational story visit: <http://nature.org/ivorybill/>.

Harmony Mappes

Inside:

- **ANWR**
- **Iowa's Dirty Water Act**
- **Global Warming Lawsuit**
- **Avoiding the Supergerm**

IOWA GLOBAL WARMING SUIT DISMISSED

Iowa and seven other states are appealing a U.S. federal district court decision to dismiss their suit claiming that emissions from major utility companies contribute to global warming and creates a “public nuisance.”

The state attorneys general of Iowa, Wisconsin, California, Connecticut, New Jersey, New York, Rhode Island and Vermont, along with environmental advocacy groups, filed the lawsuit against five of the largest U.S. power companies with coal burning plants. The companies included Electric Power Co., Cinergy Corp., Southern Co., Tennessee Valley Authority and Xcel Energy. Together, the companies own 174 fossil fuel-burning power plants in the U.S.

The states argued that scientific research indicates that greenhouse gases, such as carbon dioxide released from coal burning plants, trap heat in the atmosphere and potentially contribute to an increase in climate change. Many scientists believe that warmer temperatures may cause rising tides, droughts, and other harms to the environment and public health.

The plaintiffs are not requesting monetary damages. Instead, the states want the utility companies to change their behavior and take all available steps to reduce carbon emissions from power plants.

The utility companies, represented by Washington-based law firm Bracewell and Giuliani, argued that the case presents a political question and therefore the environmental policy dispute is non-justiciable.

On September 15, U.S. District Court judge Loretta Preska in Manhattan agreed, finding that environmental harms should be addressed by the legislative and executive branches.

“Cases presenting political questions are consigned to the political branches that are accountable to the people, not the judiciary,” Preska held.

Iowa and the other 7 states plan to appeal the judgment.

Beth Chesterman

GLOBAL WARMING Sources:
Investor’s Business Daily, Stephanie Cohen, 9-15-2005
Associated Press, Michael Hill, 9-16-2005
Associated Press, David Gram, 9-16-2005

KATRINA Sources:
Brian W. Cashell & Marc Labonte, The Macroeconomic Effects of Hurricane Katrina, CRS Rep. for Cong. (Sept. 13, 2005).
An Unnatural Disaster: The Aftermath of Hurricane Katrina (Member Scholars of the Center for Progressive Reform) Sept. 2005.

DIRTY WATER Source:
Waterloo/Cedar Falls Courier, Oct. 7, 2005, Dan Haugen

BATTLE OVER THE ARCTIC NATIONAL WILDLIFE REFUGE

On Nov. 3, the Senate approved the controversial drilling in the Refuge by a vote of 51—48. This version of the proposal was attached to a budget bill, making it immune from the filibuster. Iowan Republican Senator Grassley voted to keep the drilling in the budget bill, while Democratic Senator Harkin voted to strike the measure from the bill. The House, however, did not pass the measure. A similar attempt to attach arctic drilling to a defense spending bill surprisingly failed to pass in the Senate recently on December 21, 2005. So while the Arctic appears safe for now, it remains a hotly contested issue and a major concern for environmentalists.

The U.S. uses approximately 7.3 billion barrels of oil a year. The oil allegedly in the region will supply the U.S. with a mere 10.5 billion barrels. Proponents are relying on the recent frustration over increased gas prices in the aftermath of Katrina to garner support. Opponents such as Congresswoman Cantwell, call it a “sweetheart deal for oil companies.” Opponents also claim that consumers will not see any significant benefit at the pump; the new oil, when at its peak in 20 years, will alter gas prices only by about a penny. Environmentalists balk at the so-called “environmentally sensitive drilling” calling it an unreliable safeguard. Pipelines, roads, sprawl and pollution are just a few of the threats drilling would bring to the unique wilderness area. The Refuge is home to many species and plays an important role in the lives and culture of the native Gwich’in people who rely on the caribou herd.

For more information on the Arctic Drilling visit: <http://www.sierraclub.org/arctic/>. At that website you can learn more about the facts and ways you can work to stop the drilling. You can also call 1-888-8WILD-AK to let your representative know of your opposition. To learn how Senators in your state voted, visit <http://www.senate.gov/> to access the roll call votes.

Harmony Mappes

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The ultimate question will be who can accommodate the massive influx of landfill garbage.

Hendrix isn’t sure if the debris can be taken out of state or if Louisiana and Mississippi will have to handle the situation alone. From an environmental pollution perspective, the debris has already been linked to chemical leakage from appliances and cleaners, oil/gas spillage from cars and furnaces, and mercury seepage. “Mercury is only present in small amounts in different things,” Hendrix said. Mercury is dangerous to humans when inhaled and can have extensive health effects in small doses.

The Environmental Protection Agency (EPA) for Region 6, which includes Louisiana, has focused its immediate efforts on sorting through the debris in order to dispose of the most threatening chemically laden items, i.e. refrigerators and air conditioners. As of October 8, 2005, the EPA had collected 65,000 containers of household hazardous materials, such as cleaning solvents, batteries and lawn products.

Generally speaking, however, Hendrix seemed optimistic. “The vegetation communities and ecosystems will recover,” he said. “It may take 30 to 50 years but the coast has been historically hit by thousands of hurricanes and has always recovered.”

Hendrix conceded that the Gulf ecosystem will see some changes, but the changes won’t be detrimental to the community as a whole. A long-time Floridian, he feels the most devastating effects of the hurricane will come when the people try to return home. “It will be the mental health of the people that has the most significant effect of the Gulf Coast,”

IOWA’S DIRTY WATER ACT

Iowa law currently permits wastewater discharge in excess of that allowed by the national Clean Water Act enacted in 1977. This leaves the state at risk for contaminated water resources and potential lawsuits from environmental groups. In response, the Department of Natural Resources is drafting new rules to put Iowa law in compliance with the Clean Water Act. However, the DNR only has authority to regulate pollution from cities and businesses. Approximately 80 percent of the state’s water pollution comes from agricultural sources, according to Chuck Corell, chief of the Iowa DNR. Therefore, the DNR’s efforts may not have an overall impact on Iowa’s water quality problems.

Beth Chesterman

he said. “Imagine a lifetime’s loss with no money to rebuild.”

Public health concerns are also numerous in terms of environmental impact. University of Iowa College of Public Health Professor Laurence Fuortes enumerated some typical health problems he’s seen after extensive flooding.

“Access to many services is obviously going to be disrupted,” Fuortes said. “We’ve already seen that there are several hospitals and clinics which haven’t reopened and may not do so for quite some time [due in part] to the destruction of infrastructure.”

Further, Fuortes said drowning, electrocution, trauma and carbon monoxide poisoning from indoor combustion for heat and cooking are other typical health problems.

The most obvious obstacle involves the city’s water supply. Floods compromise water treatment and wastewater treatment systems, Fuortes said. “Sewage rises out of septic tanks, out of waste water treatment centers and out of farm sewage ponds with resultant risks for tetanus and other nasty wound infections,” he said. Some likely disease outbreaks include hepatitis A, a fecal oral virus, and leptospirosis, a spirochetal bacterium that is spread by feedlot sewage ponds and mammals’ urines. According to Fuortes, Iowa experienced an outbreak of leptospirosis during the floods of ‘93.

Currently, the EPA is working with the Louisiana Department of Health and Hospitals and the Louisiana Rural Water Association to evaluate the status of drinking water. The organizations are testing drinking water, private well water and floodwaters for harmful bacteria.

Unfortunately, the public health effects won’t end with the

cleanup. “There is a risk of other vector borne diseases after the ecology changes [as a result of the floods],” Fuortes said. Mosquito overgrowth may cause risks of mosquito borne encephalitis.

Because Louisiana and Mississippi make up 2 percent of the total U.S. gross domestic product, the effects of Hurricane Katrina on the national economy will be insubstantial, according to a Congressional Research Service Report produced by the Government and Finance Division. National economic growth is expected to be at least one percent slower than in the second half of 2005 than the first half. However, the economic effects on 2006 are more optimistic.

Hendrix thinks the economic effects on Iowa will be limited to the Mississippi River’s ability to act as a “highway to the ocean.” Grain shipments could continue to take longer periods of time to reach their destinations, and imports could be affected as well over the long term.

Most scientists agree that most of these environmental impacts could have been less severe or eliminated all together. In 1998, state federal agencies with the help of non-governmental organizations created “Coast 2050: Toward a Sustainable Coastal Louisiana.” The project included a \$14 billion plan to restore the coastal ecosystem of Louisiana that was never funded. Coastal restoration could have abated the storm or lessened the accumulation of the storm surge that broke the Lake Pontchartrain levee. Unfortunately when Hurricane Katrina a category 4 storm, hit New Orleans, the result was an environmental catastrophe scientists had long feared.