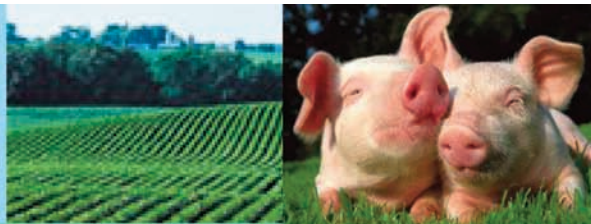


JFAN

JEFFERSON COUNTY FARMERS & NEIGHBORS, INC.



FARMS, NOT FACTORIES!

A Nonprofit Educational Foundation

Volume 7 ~ FALL/WINTER 2010

CAFO ACTIVIST WINS PRESTIGIOUS ENVIRONMENTAL AWARD



Photo: Tom Dusenbery/Goldman Environmental Prize

BY THE GOLDMAN ENVIRONMENTAL PRIZE STAFF WRITERS

Sustainable farmer Lynn Henning was awarded the 2010 Goldman Prize for North America this year for her work in combating CAFOs in her home state of Michigan. Considered the "Nobel Prize for environmental activism", the Goldman Prize honors one extraordinary grassroots environmental hero from each of the six inhabited continental areas for their sustained, significant, and successful efforts to protect and enhance the natural environment, often at great personal risk.

The following article is reprinted, in part, with permission from the Goldman Environmental Prize website.

Lynn Henning has emerged as a leading voice calling on state and federal authorities to hold livestock factory farms accountable to water and air quality laws. With her husband, she farms 300 acres of corn and soybeans in Lenawee County within 10 miles of 12 CAFO facilities. Her mother-in-law and father-in-law, both in

their 80s, live within 1000 feet of a CAFO operation and have both been diagnosed with hydrogen sulfide poisoning.

In 2000, as her small rural community was inundated with CAFOs, a nearby CAFO operator accused Henning and her husband of reporting the facility's waste

HENNING continued on p. 4

THE MYTH OF METHANE DIGESTERS: CLIMATE, GHG, AND MANURE

BY FRANCIS THICKE
CO-OWNER AND CO-OPERATOR
RADIANCE DAIRY, FAIRFIELD, IA

Excerpted from Francis Thicke's new book, **A NEW VISION FOR IOWA FOOD AND AGRICULTURE**, published by Mulberry Knoll.

Climatologists tell us that our climate is changing, and one of the causes of climate change is the growing concentration of heat-trapping "greenhouse gases" in the air. The most prevalent greenhouse gas (GHG) is carbon dioxide. However, in agriculture two other greenhouse gases are of major concern: methane, which has over 20 times the GHG potency of carbon dioxide, and nitrous oxide, which has about 300 times the potency of carbon dioxide. Agriculture con-

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JIM BRAUN

DR. KAMYAR ENSHAYAN

JFAN Annual Meeting Wednesday, October 6 7:30 pm Fairfield Arts & Convention Center
Sustainability: Post CAFO - Restoring Agriculture, Community and Economic Self-Sufficiency

JFAN NEWSLETTER

JEFFERSON COUNTY
FARMERS & NEIGHBORS, INC

Volume 7 ~ FALL/WINTER 2010

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In the News.....

OHIO TAKES MAJOR STEPS FOR ANIMAL WELFARE

To stave off an anti-factory farming voter initiative, Ohio Governor Ted Strickland implemented a landmark animal welfare agreement that will phase out many types of confinement systems for hogs, calves, and chickens, reports *Sustainable Food News* and the Humane Society.

The deal, struck between the Humane Society of the United States, Ohioans for Humane Farming, Ohio agriculture leaders, and Governor Strickland, will lead to major animal welfare improvements, reform industry practices, and improve prospects for adoption of critical legislation in other areas.

The agreement puts a hold on a planned factory farming ballot initiative in November spearheaded by Ohioans for Humane Farms. The organization was ready to submit over 500,000 signatures to the Ohio Secretary of State the day the agreement was reached.

The agreement provides for the following provisions:

- A ban on veal crates by 2017.
- A ban on new gestation crates after December 21, 2010. Existing crates must be phased out within 15 years.
- A moratorium on permits for new battery cage confinement facilities for laying hens.
- A ban on strangulation of farm animals and mandatory humane euthanasia methods for sick or injured animals.
- A ban on transporting downer cows for slaughter.
- Enactment of legislation establishing felony-level penalties for cockfighters, and a crackdown on puppy mills and the acquisition of dangerous exotic animals.

"This agreement represents a joint effort to find common ground. As a result, Ohio agriculture will remain strong and animals will be treated better," Strickland said. "Instead of expending tens of millions of dollars and unproductive energy fighting an acrimonious campaign through the fall, both sides will be able to continue investing in our agricultural base and taking care of animals."

EGG RECALL ORIGINATED AT IOWA CAFOs

Over half a billion eggs linked to a nationwide outbreak of Salmonella this summer were recalled by Iowa-based Wright County Egg and Hillandale Farms, reports the *Des Moines Register*. The outbreak sickened nearly 1500 people.

Wright County Egg is a massive egg production confinement and feed mill in Galt, Iowa owned by Jack DeCoster of DeCoster Farms. Hillandale Farms uses DeCoster hens and feed at its New Hampton operation. Combined, the two CAFOs house 7.7 million hens.

Filthy, rat and fly-infested conditions were found at the facilities. Dead, decomposing chickens were often seen in the same cages as egg-producing hens. Mountains of manure were reported as high as 40 feet.

Two USDA egg grader inspectors repeatedly complained about unsanitary conditions over a 20-year period, but USDA officials ignored their reports.



DeCoster Farms had a long history of environmental violations, poor or unsafe working conditions, sexual harassment and rape charges, and illegal immigrant workers. It has paid out \$5 million in fines since 1996.

Jack DeCoster was labeled a "habitual violator" by the DNR in 2000 after he lost a series of lawsuits for polluting Iowa waterways with his pork operations. He was banned from developing further confinements for a five-year period, but surreptitiously obtained a permit the following year for a Wright County chicken operation.

Iowa Secretary of Agriculture Bill
RECALL continued on p. 8

In the News.....

SOME PROGRESS MADE ON PASSAGE OF FARM ANTIBIOTIC BILL

BY DIANE ROSENBERG, EDITOR

Over 350 medical and environmental organizations and over 1000 health care providers are supporting The Preservation of Antibiotics for Medical Treatment Act of 2009 (PAMTA), House Bill 1549, that would dramatically affect the way antibiotics are used on farms. If passed, PAMTA would ban antibiotics for growth promotion and disease prevention. (See our story, "US Bill Would Ban Non-therapeutic Antibiotics in Livestock" in the Fall/Winter 2009 newsletter.)

Studies by the World Health Organization have shown that eliminating the routine use of antibiotic feed additives would not compromise food safety. Other studies have shown that with good animal husbandry, continuous doses of antibiotics are not needed to prevent disease.

When we first reported about PAMTA a year ago, the bill sponsored by Louise Slaughter (D-NY) had 40 co-signers. Today, the number is 122 and growing. Jefferson County's congressional representative, Dave Loebsack, has yet to co-sponsored the bill.

Attention is increasing on PAMTA and the routine use of antibiotics on factory farms. This summer the FDA issued draft guidelines to phase out the use of antibiotics for growth promotion and to require veterinary supervision of farm antibiotic use. The FDA proposal does not include PAMTA's provision of phasing out preventative antibiotics.

Progress on moving PAMTA forward has been slow, but not stagnant. The House Energy and Commerce Committee held three meetings on the bill this past year. The last meeting, held July 14, convened a group of physicians and veterinarians with varying viewpoints.

Proponents of the bill included Dr. Joshua Sharfstein, Principle Deputy Commissioner of the FDA, and Dr. Ali Khan, As-

sistant Surgeon General and Deputy Director of the National Center for Emerging and Zoonotic Infectious Diseases at the Centers for Disease Control and Prevention. Dr. Khan testified that there is absolute and compelling evidence that antibiotic use in livestock leads to drug resistance that has a harmful impact on the human health.

Dr. John Clifford, the USDA's Deputy Administrator for Veterinary Services, Animal and Plant Inspection Service, also admitted that the USDA believes it is likely that antibiotic

use in industrial agriculture does lead to some resistance in humans and animals.

The American Veterinary Medical Association (AVMA) opposes the legislation. Dr. Christine Hoang, Assistant Director of AVMA's Scientific Activities Division, testified that the "impacts on animal health and welfare and even negative impacts on human health...are often unrealized."

AVMA writes on its website that Denmark's 2000 ban of growth promoting and prophylactic antibiotics did not decrease human antibiotic resistance and led to increased animal disease and death. This assertion has been challenged by a number of studies including those of the World Health Organization. (See sidebar.)

It's should be noted that in 2009, six of the AVMA's top nine donors listed on their website (www.avma.org) were pharmaceutical companies.

Banning the nontherapeutic use of antimicrobials, substances that kill or inhibit the growth of bacteria, fungi, protozoans, and viruses, was the number one recommendation of the Pew Commission report on Industrial Farm Production, released in 2008.

Sources: *KeepAntibioticsWorking.com*, *The Huffington Post*, *American Veterinary Medical Association* www.avma.org, *JAVMA News*, *US House of Representatives Committee on Energy and Commerce Memorandum*, *Greenbay Press Gazette*



FACTS ABOUT DENMARK'S FARM ANTIBIOTIC BAN

Between 1995 until the end of 1999, Denmark, the world's largest exporter of pork, ended the use of antimicrobials for disease prevention and growth promotion.

The following are some facts about the ban reported by KeepAntibioticsWorking.com, a coalition of organizations working to pass PAMTA, and a July 12, 2010 Congressional Memorandum by the US House of Representatives Committee on Energy and Commerce.

- The Danish Veterinary Institute found the ban did not affect the levels of major human pathogens in chickens or pigs.

- In 2001, after the ban had been fully implemented, total antibiotic use in livestock was reduced to 54% of 1994 levels. Antimicrobials used to treat disease rose somewhat since then to about 60%, but Danish authorities attribute the rise to viral diseases unrelated to the growth promoter ban.

- The ban had a minimal overall impact on animal production. A Danish study found the largest impacts were small increases in the mortality rate of nursery pigs (up to 50 pounds), from 2.9% to 3.5%. However, the mortality rate for finishers (those ready for slaughter), which constitute a bigger investment, was reduced and was similar to large US swine farms, approximately 7%, reported a USDA study.

- Overall, a World Health Organization (WHO) study found the ban resulted in no adverse economic effect on chicken producers and only a 1% reduction on swine producers.

- A 2002 WHO study found the ban led to significant reduction in antibiotic resistance for those drugs covered in the ban, including macrolides, streptogramins, and glycopeptides. Drugs not covered by the ban were not affected one way or another.

HENNING *continued from p. 1*

discharges to state officials, which they denied. The accusation prompted Henning and other concerned neighbors to form Environmentally Concerned Citizens of South Central Michigan (ECCSCM), and they began organizing to bring the CAFOs to justice. Soon, Henning was urging state and federal agencies to step forward and protect the environmental and public health of the region. Reaching out to neighbors, fellow farmers and EPA enforcement officials, Henning gathered as much information as possible about CAFO pollution spills, their locations and points of origin. Regularly driving a 125-mile circuit multiple times a week to track CAFO operations and surreptitiously take water samples, Henning began to understand the practices at CAFO sites that were causing the pollution of the area's waterways.

She joined forces with the Sierra Club's Michigan Chapter as a volunteer Water Sentinel in 2001 and became a staff member in 2005. With their support, Henning led efforts to develop water quality monitoring programs to measure pollution levels from CAFOs and document their impact on local watersheds. Working with a volunteer pilot and a photographer, Henning used satellite imagery and GPS coordinates to document specific areas and waterways impacted by CAFO pollution.

Henning and ECCSCM developed a body of data on CAFO operations beyond that of Michigan's own regulatory agencies, including the DEQ [Department of Environmental Quality]. She brought her data and tools to state regulators to encourage them to take stronger enforcement action, sharing her monitoring techniques and aerial documentation, as well as her findings on CAFO pollution. As a result, the DEQ levied hundreds of citations against Michigan CAFOs for environmental violations.

For the first time, in 2008 the DEQ denied a permit to a proposed CAFO facility, based largely on Henning's findings and recommendations of the local citizens group fighting the proposal. While a new permit was later granted, the community is crafting an appeal with Henning's support. Henning regularly travels to assist other communities across the country that are challenging CAFOs. Region 5 of the EPA, which serves several Midwestern states, has incorporated some of Henning's techniques into its own CAFO investigations.

Henning recently helped form a statewide

In the News.....

NRC: FARMING SHOULD ADOPT SUSTAINABLE PRACTICES

The National Research Council has taken a hard look at national agricultural policies and research programs. Their new report, "Toward Sustainable Agriculture in the 21st Century" says the US should look beyond industrial agriculture and adopt a holistic perspective to farming that encompasses multiple end goals



according to an NRC press release.

"Many modern agricultural practices have unintended negative consequences, such as decreased water and air quality, and farmers have to consider these consequences while trying to increase production," says Julia Kornegay, chair of the report committee and professor and head of the Department of Horticultural Science at North Carolina State University, Raleigh. "If farmers are going to meet future demands, the US agriculture system has to evolve to become sustainable and think broadly — past the bottom line of producing the most possible."

The report exposes hidden costs not accounted for in industrial agriculture pro-

committee made up of representatives of the state departments of agriculture and health, the DEQ and Michigan citizens groups charged with conducting a first-ever assessment of the environmental impacts of CAFOs on public health. Lisa Jackson, current head of the federal EPA, recently stated that her department will take steps toward stricter enforcement of the Clean Water Act rules regulating CAFO waste.

*Reprinted by permission
www.goldmanprize.org/2010/northamerica.*

ductivity measurements, such as the impact of water pollution and greenhouse gas emissions. It also found that consumer concerns about farm animals and food safety pose challenges to farmers.

Farmers' income is also not keeping up with rising production costs, primarily due to the higher prices of seeds, fuel, and synthetic fertilizer. More than half of US farm operators work off the farm to supplement their income and to obtain health care and retirement benefit plans.

To help achieve a sustainable agriculture system that looks beyond the end goal of providing more goods, the report committee identified four goals that should be considered simultaneously:

- Satisfy human food, fiber, and feed requirements, and contribute to biofuel needs.
- Enhance environmental quality and the resource base.
- Maintain the economic viability of agriculture.
- Improve the quality of life for farmers, farm workers, and society as a whole.

Achieving a balance of the four goals, and creating systems that can adapt to fluctuating conditions, are hallmarks of greater sustainability, they wrote. This will require long-term research, education, outreach, and experimentation by the public and private sectors in partnership with farmers.

The Bill & Melinda Gates Foundation and W.K. Kellogg Foundation sponsored the report.

Copies of the report are available for purchase at www.nap.edu/catalog.php?record_id=12832

JFAN'S GOOD NEIGHBOR GUIDELINES

www.jfaniowa.org/GoodNeighbor-Guidelines.htm

OUR ACTIVITIES AT A GLANCE:

JFAN WORKING HARD FOR YOU

BY DIANE ROSENBERG, EDITOR

CAFO Expansion in Jefferson County

In August, JFAN learned that the Iowa DNR approved a manure management plan expanding a hog confinement owned by Jeff Buch. We understand the confinement will increase by 300 hogs, bringing its capacity to 1950.

Consistent with our community policies, JFAN sent letters to approximately 50 neighbors within a two-mile radius alerting them about the expansion. The facility, located on 170th street, is also within a mile and a half of Maharishi Vedic City, and the City has been informed.

According to the DNR, the confinement is switching over to a feeder-to-finishing operation and will not involve any additional construction. This type of operation purchases weaned piglets and raises them until they are ready to be sold for slaughter, generally a 16-week period. It requires the most feed and produces the most manure compared to other hog operations. The new hogs will be housed in the current structure that was modified to accommodate the additional hogs.

JFAN contacts the DNR on a weekly basis to monitor new CAFO developments or expansions. Normally, expansions of 1000 or more hogs involve a minimum 30-day review period and over 2000 a 60-day review period during which public comments may be made. Because of the small size of this expansion, and the fact that the total herd is less than 2400 hogs, the approval was obtained in only three days.

JFAN is currently reviewing the manure management plan to see if Mr. Buch's plan might impinge on the quality of life of Maharishi Vedic City or any of the surrounding neighbors. Mr. Buch has a history of DNR violations that we are also reviewing. If any of Mr. Buch's neighbors express concerns, we will meet with them to discuss the situation. We will keep you informed of any further developments.

*Reprinted from the September 9, 2010
FAIRFIELD WEEKLY READER*

More Awards for MSAE Students' CAFO Study

Minna Mohammadi and Pearl Sawhney, two Maharishi School students who won a multitude of awards this March at the State Science and Technology Fair of Iowa for their study on animal feeds and pollution, have gone on to win additional accolades at several subsequent science competitions.



Photo Credit: Dan Welk, Click! Photography

Their study, "Farm Feeding Practices: Exploring Solutions for Environmental Sustainability" examined the environmental impact of various types of feeds on water pollution. JFAN funded the study with an educational assistance grant.

Ms. Mohammadi and Ms. Sawhney won first place at the Eastern Iowa State Science Fair, also held in March, and were awarded the Special Prize of the Iowa Environment and Water Pollution Board.

In April, the students presented their study at the Iowa Junior Academy of Science Competition held in Des Moines. They were conferred "Top in the State" and were invited to be the Iowa representatives at the American Junior Academy of Science competition, to be held in Washington, D.C. in February 2011. There they will share their research with leading scientists during an all-expense paid, five-day seminar.

The students then traveled to San Jose, California to attend the Intel International Science and Engineering Fair in May, an invitation that sprang from their success at the State Science and Technology Fair of Iowa. They competed against 10,000 other students from 56 countries, met the CEOs of Intel and Google as well as the inventor of the USB interface, and toured

Google headquarters. Each student also received a four-year scholarship to Sierra Nevada College near Lake Tahoe, Nevada for their work.

This fall Ms. Mohammadi and Ms. Sawhney, now juniors, are submitting their project to the state-level 2010 Siemens Competition in Math, Science & Technology.

The students are presently considering an expansion of their award-winning study for their next wave of science fair projects.

JFAN Provides Support for Scott County CAFO Expansion

The Scott County Board of Supervisors recommended the proposed expansion of a hog confinement near Eldridge in northeast Iowa after an impassioned public hearing in August, reports the *Quad City Times*. Opponents raised concerns about water and air quality, the manure management plan, and what they considered an inflated score of the Master Matrix. The confinement would expand from 9,465 to 12,487 hogs.

Neighbors approached JFAN for advice, and we provided information about our online booklet, *How to Protect Your Family and Farm from Factory Farms*, and directed the group to the host of information on our website, www.jfaniowa.org.

The confinement scored 480 on the Master Matrix, a scoring system that evaluates the siting of a CAFO. Iowa Citizens for Community Improvement (ICCI) conducted an independent assessment that scored the Matrix at 330. The passing score for a Master Matrix is 440.

The expansion would entail expanding two existing buildings and constructing two new buildings at the site.

ICCI appealed the case with the Iowa DNR, and the agency conducted a farm inspection as part of the construction application process. Two problems related to manure handling were discovered that led to high levels of E. coli and ammonia in a drain tile, and the DNR issued a notice of violation. No fines or penalties were levied.

The DNR has 60 days to approve or deny an application. If approved, the applicant or the county can ask for a hearing before the Environmental Protection Commission or an administrative law judge.

NEWS BRIEFS

FROM IOWA, THE US AND BEYOND

EPA Decision to Benefit National Waterways

The US Environmental Protection Agency reached a settlement with three environmental organizations in May that will require the agency to gather more information on CAFOs to determine if additional confinements should be regulated reports ABCNews.com.

The National Resources Defense Council, Sierra Club, and Waterkeepers Alliance filed a federal lawsuit in 2009 charging the EPA gave confinement operators too much freedom in deciding whether or not CAFOs needed permits to discharge manure into waterways.

The EPA will now be required to obtain information from confinements without National Pollutant Discharge Elimination System (NPDES) permits in order to decide whether they should be regulated. The EPA will adopt a rule on information collection with public comment and final action to be taken within a two-year period.

Some of the information to be gathered includes number of animals, amount of waste produced, and how manure is managed and disposed.

The environmental groups praised the settlement, while a spokesman for the National Pork Producers Council criticized the EPA for not talking with farmers before making the deal.

New California Law Eliminates Battery Cages

In July, California Governor Arnold Schwarzenegger signed landmark legislation to protect animal welfare and food safety reports the Humane Society. As of January 1, 2015, whole eggs sold in California are required to come from hens that are able to stand up, fully extend their limbs, lie down, and spread their wings without touching each other or the sides of their enclosure, thus requiring cage-free conditions.

Supporters include the Sierra Club California, Planning and Conservation League, Center for Food Safety, Center for Science in the Public Interest and dozens more organizations.

This comes after passage of Proposition

2, the Prevention of Farm Animal Cruelty Act. Nearly 64 percent of voters passed Prop 2, which got the most votes of any citizen initiative in California history.

Hospitals Save Antibiotics for Patients, Not Food

Nearly 300 hospitals across the nation have signed a pledge with the environmental coalition Health Care without Harm (www.noharm.org) to



improve food quality for their patients, the environment, and all US citizens, reports *Cleveland.com*. The eight-point pledge includes purchasing only antibiotic-free meats.

Other parts of the pledge include buying locally raised and grown foods and minimizing or reusing food waste.

California CAFO Lawsuit Goes to Trial

A federal court has cleared way for a lawsuit filed by The Humane Society and several Lathrop, California residents against Olivera Egg Ranch, one of California's largest egg factory farms, for releasing high levels of the toxic gas ammonia into the community, reports a Humane Society press release.

Ruling from the bench, Judge John A. Mendez rejected Olivera's motion for summary judgment and motions to dismiss. The case was originally filed in 2008.

The giant factory farm regularly confines more than 700,000 hens in cramped cages and dumps 133,000 pounds of manure every day into lake-sized cesspools that release large amounts of ammonia and other noxious gases. The suit alleges Olivera's failure to report its

daily pollution violates two federal environmental laws, and the horrible odors and severe discomfort it causes constitute a nuisance under state law.

The court previously ordered Olivera to pay \$143,057 in sanctions for destroying evidence related to air pollution on its property in 2009.

Eight Iowa Feedlots Receive EPA Violations

The federal Environmental Protection Agency has taken a series of civil enforcement actions against eight beef feedlots in northwest Iowa for violations of the Clean Water Act, reports the *Iowa Independent* and *Radiolowa.com*.

The feedlots are operating without permits. All but two of the feedlot operators have discharged runoff into already impaired waterways.

All eight operations must apply for a National Pollution Discharge Elimination System (NPDES) permit and complete wastewater controls for their feedlots by October 31, 2011.

CAFO/Digester Combo Proposed

A New Liberty operator is proposing to build a four-building, 4800-head CAFO along with an anaerobic digester to process the manure. The digester will convert the manure and bedding into enough methane gas that he claims will power two generators, reports *Radiolowa.com*. Two other similar digesters are currently operating in Iowa.

Many people opposed the facility at a public meeting held by the Scott County Board of Supervisors in June. Intrigued by the digester, the Board of Supervisors approved the permit. The permit is being reviewed by the DNR which has the authority to issue final approvals.

Additional source: North Scott Press

Is "Enviropig" A Greener Hog?

Researchers at the University of Guelph in Ontario claim they've produced a genetically engineered pig that is less polluting to the environment reports *AOL News*. The "Enviropig" produces an enzyme that cuts phosphorus in pig manure by up to 65%.

Phosphorus is a leading cause of water pollution, creating algae blooms that

deplete the water's oxygen, leading to large "dead zones."

However, it's not just phosphorus in pig manure that is problematic, says Tom Philpott, food editor for Grist.org and co-founder of Maverick Farms in North Carolina, "It's also full of nitrogen, which feeds dead zones and puts nitrates in folks' drinking water. It contains ammonia, methane, hydrogen sulfide, carbon monoxide, cyanide and heavy metals," he told AOL News.

"The answer to the pig waste problem will not come from a lab, but rather from policies that crack down on the disastrous practice of factory hog farming," said Philpott.

Enviropig has not yet been approved for commercial use.

Possible Takeover of Smithfield on the Horizon

Brazil conglomerate JBS, the largest industrial meat producer in the world, is setting its sights on acquiring hog giant Smithfield Foods reports Grist.org. It purchased Smithfield's beef operation in 2008 and is in negotiations now for its Smithfield's pork division.

Smithfield has struggled during the last few years with volatile feed costs, H1N1 flu panic, and a poor economy. Should the merger go through, three companies – JBS, Tyson, and Cargill – will control nearly the entire US meat market.

If a deal is reached, the US Justice Department will likely weigh in and possibly block the move. The DOJ has been reviewing the power and influence of industrial agriculture for the past several months.

Former DNR Director Says Agency Badly Under Funded

In his parting comments, Richard Leopold, former Director of the Iowa DNR, says the state agency has been hard hit with budget cuts that undermine its ability to do its job well reports Radiolowa.com.

"As far as the resources for our department to do what we need to do, we are – in my opinion – woefully and shamefully under funded," he said during an interview with *The Des Moines Register*.

Mr. Leopold began a new job in Minnesota with the US Fish and Wildlife Service on September 12.

Of the state's "General Fund", less than one quarter of one percent is provided to the DNR. Leopold says this is why Iowa ranks 49th in the US in supporting its natural resources.

State budget cuts have decreased the DNR's general operating budget by more than 30%, more than any other state agency, he said. This has impacted the agency's ability to rectify problematic livestock operations. While recognizing it was not politically possible, Mr. Leopold

recommended throwing out every state regulation of the livestock industry and start from the beginning.

**JFAN Financial Assistance
Grants for Alternative Farming
www.jfaniowa.org**

HELP JFAN HELP YOU

For over five years, JFAN has been working to stop the proliferation of CAFOs in Jefferson County.

Through community education, community service, and financial assistance grants, JFAN has helped to keep CAFO development at bay. Several potential CAFOs have been **stalled, stopped, or built away** from concerned neighbors because of our efforts.

It takes resources to do this, and we are turning to you, fellow neighbors who are equally concerned with maintaining our high quality of life, to help us continue our efforts to protect you and your families.

Please consider giving generously to JFAN today, your "High Quality of Life Protection Policy." Thank you for all you do.

Please return this donation form below or visit our website at www.jfaniowa.org to make a secure, tax-deductible donation.

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Please cut out this form and mail it with your tax-deductible donation to:

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P.O. Box 811
Fairfield, IA 52556**

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Click on "What you can do" then click on "Make a Donation"
and follow the simple instructions.

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DIGESTERS *continued from p. 1*

tributes about eight percent of total GHG emissions in the US.

The release of nitrous oxide from soils is, by far, the largest source of GHG emissions from agriculture in the US. Nitrous oxide emissions from soils can come from soil organic matter, legumes, manure, and other sources, but the largest source is from synthetic nitrogen fertilizer. About 2.5% of synthetic nitrogen fertilizer applied to crops is released into the atmosphere as nitrous oxide. If farmers were to diversify crop rotations by including more nitrogen-fixing crops in rotations, less synthetic nitrogen would be needed, which would reduce nitrous oxide emissions. That would also reduce the amount of fossil fuel required to synthesize nitrogen fertilizer, concomitantly reducing carbon dioxide emissions.

Methane is the second largest source of GHG emissions from agriculture in the US. Over 70% of agriculture's methane emissions come from enteric fermentation, a fancy term for gas produced in the digestive tracts of animals, mostly cows and other ruminant animals. Since rumen fermentation is a natural process, that methane source cannot be eliminated, although research is finding that ration adjustments can help reduce enteric methane emissions.

In the US, about a fourth of the methane from animal sources comes from manure after it leaves the animal. That source of methane can be greatly reduced with appropriate management. For example, when manure is deposited in pastures or is composted, very little methane is generated. However, when manure is stored in liquid pits, it becomes anaerobic creating ideal conditions for methane to be generated in the liquid manure pit.

Because hogs are not ruminants, they produce very little methane from enteric fermentation. Nearly 90% of methane emissions from hog production in the US

is generated from manure while it is stored in liquid pits. Raising hogs on pasture or in deep-bedded housing would substantially reduce methane from hog production.

One "solution" that has been proposed to solve the problem of methane emissions from stored liquid manure is to build methane digesters next to CAFOs to produce and capture methane from the manure.



Methane produced by digesters is sold to biogas companies that convert it to electricity.

While it is true that methane digesters will reduce methane emissions and produce methane fuel, it is important to also consider some of the limitations of methane digesters. One limitation is that

methane digesters require animals to be in confinement so that their manure can be collected to be put into the digester. Animals that are out grazing in pastures spread their manure on the landscape where the manure decomposes and returns the nutrients to the soil and does not emit much methane during decomposition. Also, when animals are housed on deep-bedded manure packs that are composted, methane emissions are much less than when manure goes into liquid manure pits.

In other words, methane digesters not only require an industrial-style livestock production system in order to operate, but also, they are only needed for prevention of methane emissions in an industrial-style livestock production system.

Also, methane digesters are very expensive to build and almost invariably require large subsidies to make building them feasible. While many types of energy systems are currently being subsidized, it should be noted that subsidies for CAFO methane digesters also indirectly serve as subsidies for industrial livestock production systems. Furthermore, public subsidy moneys are also often used to build liquid manure storage systems for CAFOs. Therefore, when considering the benefits of methane digesters to reduce methane emissions from stored CAFO manure, it is important to also consider that there are alternative livestock production systems...that cir-

cumvent the need for methane digesters because they do not use methane-emitting liquid manure storage systems.

Considered solely from the energy-production point of view, methane from manure is not a high-producing source of energy. That is because when animals eat feed, they utilize most of the energy of the feed for their own metabolism, which means that their manure is much lower in energy than the plant materials they ate. For methane generators connected to CAFOs to produce a lot of energy, additional biomass will need to be added to the manure.

Francis Thicke and his wife, Susan Noll, are owners and operators of an organic,



grass-based dairy near Fairfield. Dr. Thicke is also a soil scientist and has served as the National Program Leader for soil science for the USDA Extension Service. He

is currently the Democratic candidate for Iowa Secretary of Agriculture.

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Northey originally contended his department had no jurisdiction to inspect Mr. DeCoster's operation. Commercial feed mills that supply feed to animal confinements are subject to periodic inspection by state agricultural officials, but an operation that grinds feed for its own livestock is exempt.

The Wright County Egg feed mill was originally considered exempt from state inspections because company officials said the feed was only provided to its hens.

The Department of Agriculture is now reviewing its inspection authority since it learned Hillandale Farms obtained its feed from Wright County Egg. Francis Thicke, Democratic candidate for Secretary of Agriculture, says Chapter 198, Section 11 of the Iowa Code gives the state agriculture department full authority to carry out such inspections.

Criminal investigators from the FDA and Justice Department are now looking into the massive recall at both facilities.

Additional sources: New York Times, DailyFinance.com, Iowa Independence, ABCNews.com